

Mule Deer of Four Hills Village and the Surrounding Open Spaces

Four Hills Village (FHV) is a unique neighborhood in many ways. How many other neighborhoods in Albuquerque have a resident mule deer herd? Year-round, deer are present here in groups ranging from 1-3 deer in the summer to 5-7 or more in the winter.

Mule Deer were given their name by the explorer, William Clark, during the Lewis and Clark Expedition in 1806, because of their large “mule” like ears that are often about $\frac{3}{4}$ their head size. They can be found in every county of New Mexico and are divided into two different subspecies. Here in FHV, and in the northern two thirds of New Mexico, the Rocky Mountain mule deer are most common, while in the southern third of the state, the desert mule deer are dominant. Rocky Mountain mule deer live in extremely varied habitats. They can be found above the timberline to low-elevation grasslands. Typically, in the winter, deer living in the higher elevations will migrate to lower elevations where food is more available and their movements are less hindered by deep snow.

Adult Rocky Mountain mule deer have a reddish, fine, silky coat in the summer and a much thicker, coarse grey coat in the winter. Their reddish-brown fawns are spotted when born but lose the white spots 2 to 3 months after they are born. Only the males grow antlers. Mule deer are larger than the white tailed-deer with adult males (bucks) ranging in weight from 120 to 300+ pounds and females (does) weighing 95 to 200 pounds.

Mule deer can easily be distinguished from their white-tailed cousins by their tails which are black tipped held low while fleeing as opposed to the white-tailed deer which hold their solid white tails high. Among the males, mule deer bucks sport antlers that grow in a ‘Y’ propagation pattern as opposed to the white-tailed buck’s antlers which rise in points from the main horizontal beam. Another distinguishing characteristic of all mule deer is their use of a unique fast bound that involves all four legs in a stiff-leg bounce, known as a “stot”. “Stotting” allows mule deer to bound straight up steep hillsides, a feat very few predators can emulate. Mule deer are also good jumpers. They are known to easily clear 6 to 8-foot-tall fences.

The life cycle of the mule deer is strongly seasonal. Breeding season or “rut” for our local mule deer begins in late November when mature bucks range over large areas in search of receptive does. One buck will breed many does and no permanent bond is formed between bucks and does. Bucks will shed their antlers following the winter breeding season but start to regrow their antlers in the early spring. The new antlers are covered by a soft dark furry skin, called “velvet.” The velvet is dense with blood vessels needed to supply the nutrients to the rapidly growing antlers. In fact, antlers are composed of tissues which are among the fastest growing in the entire animal kingdom. In late August or September, the velvet dries up and the bucks then rub it off their now-mineralized and hardened antlers

The does have a gestation period of about 7 months and fawns are usually born in June or July. The doe will leave the herd and seek out an area covered by heavy brush with a good water supply nearby. Typically, a healthy mature doe will have twins. Fawns will get up on their feet only hours after birth but are unsteady and very susceptible to predation. During the first few days the fawns stay hidden, still, and alone, except for feeding. One protective adaptation is that fawns have virtually no scent. The mother usually stays nearby but does not sleep with the fawns. At about 3 weeks the fawns will start to try solid foods, and shortly thereafter will accompany their mothers by day. Most fawns are weaned by October or November. Yearling females usually stay with the herd, while the yearling males are eventually forced out to join bachelor herds or to fend for themselves. Sexual maturity for both sexes is generally reached at 1.5 to 2 years.

Mule deer are crepuscular -most normally feeding in the morning, just after sunrise, and in the late afternoon or early evening, just before and after sundown. During the day, they will typically bed down in secluded places that allow them good observational advantages and quick escape routes. Mule deer are ruminants, meaning that they have a four-chamber stomach whose first chamber is called the "rumen". Deer process their food by first ingesting and coarsely chewing, then swallowing. Later, they regurgitate the contents of the rumen and chew the "cud", a process called "ruminating" (and the source of two commonly used expressions). Deer again swallow the cud, which is then processed by the other stomach chambers and on through the rest of digestive system.

Unlike most larger ruminants, deer have a small rumen. This forces them to seek out vegetation that is highly digestible with high nutritional value per unit volume. Because of their need for high quality foods, deer are always on the move while feeding. They take a bite and move on, spending little time in one spot. The diet of the mule deer is very diverse and reflects what is available. They prefer forbs (flowering herbaceous plants, weeds) and browse (leaves, buds, and new shoots of shrubs and trees such as Douglas fir, cedar, yew, aspen, willow, dogwood and juniper, and are particularly fond of members of the rose family). They will also eat mast (acorns, berries, larger fruits, maple seeds) and, although not favored, deer will eat young and actively growing grasses. In the winter they will include tips of evergreens and succulents (cacti) in their diet. The availability of water can influence a deer's choice of a particular area to forage. Daily intake varies from 0 to 1 1/2 quarts per 100 pounds of body weight.

The preferred habitat of mule deer is a mosaic of terrains that include an abundance of highly variable herbaceous forage, trees, and landforms that provide hiding and thermal cover (cool shade in the summer and heat preservation in the winter), and access to multiple sources of water. Mule deer generally avoid dense forests but will seek out areas with open meadows, interspersed with tree stands of various species, ages, and heights. They prefer to stay in proximity of large stands of woodlands that can offer cover for predator evasion and thermal protection. One can see why mule deer are often drawn to more open urban areas developed in the foothills of New Mexico (e.g., FHV).

A healthy mule deer will live 7-15 years in the wild. Malnutrition is the single most important natural cause of death in deer. The second greatest natural cause of death is predation by mountain lions, black bears, Mexican wolves, coyotes, and feral dogs. Mankind, whether armed for hunting, or driving a motor vehicle, kills the largest number of deer each year.

The New Mexico mule deer population is currently relatively stable but has been declining since the 1960's. The main culprit in the decline appears to be habitat loss due to numerous causes, including the lack of controlled forest burns to clear out the understory brush and to increase the diversity of plant life; logging; the expansion of single crop farming; and the development of large-scale cattle ranching. Other factors are the expansion of new home and industrial construction into the favored foothill and savannah environments, and the range expansion of non-native plants reducing the availability of the more nutritional native vegetation. Regional droughts have also placed a significant strain on the herd sizes especially the one in 2008-10.

Four Hills Village with its large open yards, numerous ponds and water features, highly varied terrain, and wide range in vegetation types, is a magnet for mule deer. The through cutting, heavily vegetated arroyos with their runoffs and springs are favored creche areas for deer to bear and raise fawns. FHV is surrounded by the Open Space's sheltering hills, forests, and rock outcrops, and has access to the migration trails and permanent springs of Tijeras Canyon. Most of FHV human residents are tolerant of losing their yucca blooms, fruit, and young plantings to the browsing of the mule deer. The deer see us

often in a non-threatening environment and have become moderately tolerant of our proximity to them. This very tolerance may put them and us in jeopardy

Mule deer are very adaptable, have good binocular vision, acute senses of hearing and smell and are very sensitive to movement. It is one of the very few large North American herbivores to survive the mass extinctions of the ice ages between 12,000 to 7,000 years ago. None of these senses or abilities to adapt seem to help them when faced with a fast-traveling motor vehicle. I know of two collisions between a mule deer and motor vehicle that happened in FHV last year. The first was a hit-and-run collision that left a doe dead at the "Y" intersection of Four Hills Rd and Stagecoach Rd early in the morning. The second collision occurred in the late afternoon, when a motorcyclist traveling south, up Four Hills Rd collided with a deer. He saw the first deer crossing the road but did not see the second one until too late. He was hospitalized and the deer died.

As you drive through Four Hills Village, watch your speed (25 mph in most of FHV) and watch out for our mule deer. Many of them are used to us and parked cars, so they may not move out of the way as quickly as you think. Be especially careful at dawn and sunset. Deer will be moving about in groups. You may see one, but often several more are in the immediate area. Their coloration makes them particularly hard to see at these times of day. Watch particularly closely as you cross the various arroyos, as these are highways for the deer. Also, watch out on the curves, as sections of road that abut open spaces or wilder areas will often be choice locations for deer to stand or cross the roads.

References

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Photographs below by
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